

# Review of the flower-inhabiting water scavenger beetle genus *Cycreon* (Coleoptera, Hydrophilidae), with descriptions of new species and comments on its biology

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## Abstract

The hydrophilid genus *Cycreon* Orchymont, 1919, previously known from two historical specimens only, is reviewed based on the numerous material collected recently from the inflorescences of various Araceae species in the Malay Peninsula and Borneo. Four species are recognized in the genus: *C. sculpturatus* Orchymont, 1919 from Sumatra, *C. armandi* Shatrovskiy, 2017 from Singapore, *C. adolescens* **sp. n.** from peninsular Malaysia, and *C. floricola* **sp. n.** with two subspecies, the nominotypical one from Peninsular Malaysia, and *C. floricola borneanus* **subsp. n.** from Borneo. All species are very similar, differing only by the pronotal punctation, shape of the clypeus and the mentum, and the form of the median lobe of the aedeagus. Specimens of *C. floricola* **sp. n.** and *C. adolescens* **sp. n.** were collected from inflorescences of various genera of the family Araceae. The field observations and analysis of mid gut contents indicates that they feed on organic material on internal organs of the inflorescences, including the pollen of the host plant. They were also observed to carry a large amount of pollen and are likely pollinators of their host species of Araceae.

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## Key Words

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new species

Malay Peninsula

Borneo

Oriental Region

pollination

## Introduction

Among the water scavenger beetles (Polyphaga: Hydrophiloidea: Hydrophilidae), the members of the tribe Megasternini stand out in terms of species and morphological diversity, faster speciation rate and the wide array of

microenvironments inhabited (Bloom et al. 2014; Fikáček et al. 2009, 2012). Most of the megasternine species are associated with various kinds of decaying organic matter, like mammal dung (e.g., Smetana 1978, Ryndevich 2008, Ryndevich et al. 2017, Arriaga-Varela et al. 2017, 2018), humid forest leaf-litter (e.g., Deler-Hernández et